



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,793	02/25/2002	Yutaka Akiba	16869N-044400US	7870
20350	7590	04/06/2004	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			HARPER, HOLLY R	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

lm

Office Action Summary

Application No.

10/084,793

Applicant(s)

AKIBA, YUTAKA

Examiner

Holly R. Harper

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-21 and 29-36 is/are allowed.
- 6) ☒ Claim(s) 22-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

The Amendment, filed on 1/2/04, has been entered and acknowledged by the Examiner.

Claims 32-36 have been entered.

Claims 14, 18-23, 28, and 29 have been amended.

Examiner's Note

There is a typographical error in claim 34. Line 10 says, "having a concave that projects", but it should read, "having a concave portion that projects".

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claim 22 is rejected under 35 U.S.C. 102(b) as being anticipated by Amano (USPN 5,371,437).

In regard to claim 22, the Amano reference discloses a plasma display panel with a front substrate (Figure 3, Element 1), a back substrate (Figure 3, Element 6), and a barrier plate between the front and back substrates (Figure 3, Elements 19, 20, 21). There is a plurality of cells (Figure 3). The front substrate is made of glass (Column 1, Line 55) and has an X electrode

Art Unit: 2879

(Figure 3, Element 17). The back substrate made of glass (Column 1, Line 57) and has a Y electrode (Figure 3, Element 23). The barrier plate is made of a metal electrode having a projection that projects into an interior region of the cell at a position where the metal electrode crosses the Y electrode (Figure 3). The projection (Figure 3, Element 20) is at a position where the metal electrode (Figure 3, Element 20) crosses over the Y electrode (Figure 3, Element 23).

2. Claims 23-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Yutaka (JP 2000-038166).

In regard to claim 23, the Yukata reference discloses a plasma display panel with a front substrate (Figure 1, Element 6), a back substrate (Figure 1, Element 13), and a barrier plate between the front and back substrates (Figure 1, Element 5). There are a plurality of cells defined by the front substrate, back substrate, and barrier plates (Figure 9). The front substrate has an address electrode (Figure 1, Element 15), a first dielectric layer (Figure 1, Element 16), a first and second electrode formed on the dielectric layer (Figure 1, Elements 18 and 19). The first and second electrodes are in crossed relation to the address electrode. The metal electrode has projections at the position where the metal electrode crosses over one of the first and second electrodes (Figure 18 and 1). The projection extends in a plane parallel to the plasma display panel (Figure 18 and 1).

In regard to claim 24, the Yukata reference discloses that the barrier plate has a partition between the first and second electrode and has an inverted U shape (Figure 1).

In regard to claim 25, the Yukata reference discloses that the first and second electrodes are formed alternately and the metal electrode forms a partition between them (Figure 1).

In regard to claim 26, The Yukata reference discloses that the metal electrode has a projection where the metal electrode crosses over the first and second electrode (Figure 1 and 18).

In regard to claim 27, the Yukata reference discloses that the metal electrode is made of a plurality of layers (Figure 1, Elements 5a, 5b, 5c) and there is a projection located near the first electrode where the metal electrode crosses over one of the first or second electrodes (Figure 1 and 18).

In regard to claim 28, the Yukata reference discloses that the projection of the metal electrode is formed at a surface of the barrier plate, which forms the side of the cell and faces each other (Figure 18).

Allowable Subject Matter

3. Claims 14-21 and 29-36 allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 14, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 14, and specifically comprising the limitation that the PDP has a barrier plate with a metal electrode that has a projection of only the metal material into the discharge space.

Regarding claims 15-17, claims 15-17 are allowable for the reasons given in claim 14 because of their dependency status from claim 14.

Regarding claim 18, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 18, and specifically comprising the limitation

Art Unit: 2879

that a PDP has a first substrate with an address electrode, first dielectric layer, a first electrode and a barrier plate containing a metal electrode with a projection portion that crosses over the first electrode.

Regarding claims 19-21, claims 19-21 are allowable for the reasons given in claim 18 because of their dependency status from claim 18.

Regarding claim 29, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 29, and specifically comprising the limitation of a PDP with a barrier plate formed with a metal electrode that has a first projection projecting into the cell at a position where it crosses over the X electrode and a second projection that projects into the cell where the projection crosses over the Y electrode.

Regarding claims 30-31, claims 30-31 are allowable for the reasons given in claim 29 because of their dependency status from claim 29.

Regarding claim 32, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 32, and specifically comprising the limitation that a PDP has a barrier plate with a metal electrode that has a concave portion that projects from said cell.

Regarding claim 33, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 33, and specifically comprising the limitation that a PDP has a first substrate with an address electrode, first dielectric layer, a first electrode and a barrier plate containing a metal electrode with a concave portion that crosses over the first electrode.

Art Unit: 2879

Regarding claim 34, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 34, and specifically comprising the limitation that PDP has a barrier plate with a metal electrode that has a concave portion that projects opposite to the cells at a position where the metal electrode crosses the Y electrode.

Regarding claim 35, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 35, and specifically comprising the limitation that a PDP has a first substrate with an address electrode, first dielectric layer, a first electrode and a barrier plate containing a metal electrode with a concave portion that crosses over the first electrode or the second electrode.

Regarding claim 36, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 36, and specifically comprising the limitation of a PDP with a barrier plate formed with a metal electrode that has a first concave portion projecting away from the cell at a position where it crosses over the X electrode and a second concave portion that projects away from the cell where the metal electrode crosses over the Y electrode.

Response to Arguments

4. Applicant's arguments, filed 1/2/04, with respect to claims 14-21 and 29-31 have been fully considered and are persuasive. The 102b rejection has been withdrawn.
5. Applicant's arguments filed 1/2/04, with respect to claims 22-28 have been fully considered but they are not persuasive.

Art Unit: 2879

Amano meets all the limitations of claim 22 and Yutaka meets all the limitations of claims 23-28.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Holly Harper whose telephone number is (571) 272-2453. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

Art Unit: 2879

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Holly Harper
Patent Examiner
Art Unit 2879



NIMESHKUMAR D. PATEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800